SUBSITUTE SPECIFICATION WITH MARKINGS TO SHOW CHANGES MADE

5 TITLE OF THE INVENTION:

Nectarine Tree 'S 6816'

CROSS REFERENCE TO RELATED APPLICATIONS:

None

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PRIORITY CLAIM:

This application claims priority of U.S. Provisional patent application Ser. No. 60/404,217 filed August 15, 2002.

15 STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT:

None

LATIN NAME OF THE GENUS AND SPECIES OF THE PLANT CLAIMED:

20 Prunus persica L. Batsch.

VARIETY DENOMINATION:

'S 6816'

BACKGROUND OF THE INVENTION

The new nectarine tree 'S 6816' was developed by the Institut National de la Recherche

Agronomique (INRA) at Angers, France, as part of a controlled breeding program. 'S 6816' was

asexually propagated by budding at Angers, France, and has been observed to remain true to type

over successive asexually propagated generations.

BRIEF SUMMARY OF THE INVENTION

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'S 6816' was selected for its suitability as a commercial nectarine tree cultivar. Fruit of the 'S 6816' cultivar matures in late July in central Washington state, and is notable for its aromatic and sweet yellow flesh. This variety is distinguishable over related variety 'S 6817' (U.S. Patent Application Ser. No. 10/642,441) by its earlier maturity date and smaller and sweeter fruit.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS:

- The photograph shows the fruit of the new cultivar.
 - FIG. 1 shows branches and blossoms of the new cultivar;
 - FIG. 2 shows a tree of the new cultivar;
 - FIG. 3 shows leaves of the new cultivar;
 - FIG. 4 shows a leaf, a stone, and a portion of a fruit of the new cultivar;
- FIG. 5 shows fruit of the new cultivar; and
 - FIG. 6 shows a sectioned fruit of the new cultivar.

DETAILED BOTANICAL DESCRIPTION OF THE VARIETY:

The new nectarine tree 'S 6816' was developed as part of a controlled breeding program.

The new nectarine tree has been observed to remain true to type over successive asexually propagated generations.

The following is a detailed botanical description of 'S 6816,' a new and distinct nectarine tree, based on observations made during the 2004 growing season, of specimens planted at Parker, Washington, USA, in 1999. The described trees were grown on 'Lovell' (not patented) rootstock. All colors are described according to the Royal Horticultural Society Color Chart. It should be understood that the botanical and analytical characteristics described will vary somewhat depending upon cultural practices and climatic conditions, and can vary with location and season. Quantified measurements are expressed as an average of measurements taken from a number of individual plants of the new variety. The measurements of any individual plant, or any group of plants, of the new variety may vary from the stated average.

15 Tree

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	Size	Large, width 2.2 m wide, height 3.4 m
	Vigor	Strong
	Habit	Upright
	Trunk	Diameter 31 cm at soil level; very rough; overcolor grey
20		201D; undercolor grey 175A; lenticels prominent, 0.3 to
		0.5 cm, yellow 159A
	Branches	Smooth, greyed red 181A, internode length 3.1 to 3.8 cm,

lateral branch diameter 1.8 cm, length 46.2 cm (previous season growth)

Leaves

	Young shoot - length of st	ipule Medium
5	Length	— Long
	Width	
	Size	Length 10.5 cm; 4.0 cm
	Ratio length to width	Medium
	Shape	Lanceolate, base rounded, apex acuminate, recurved, cross
10		section concave
	Shape in cross section	Concave
	Recurvature of apex	——Present
	Angle at base	Acute
	Angle at apex	Large
15	Color	Upper surface green 146A, lower surface green N144A,
		upper venation color green 154D
	Texture	Smooth
	Margin	Serrate to serrulate
Pe	tiole	
20	Length	Short
	Size	Length 1.5 cm, diameter 0.2 cm
	Color	Green 154D

	Nectaries	Present		
	Shape of nectaries			
	Predominant number of n	Predominant number of nectaries - Two		
	Glands	Present, usually 2, reniform		
5	<u>Flowers</u>			
	Bud	Length 0.9 to 1.1 cm, round, smooth, hardy, red-purple 59A,		
		tip pink 62A		
	Bud burst	March 18 at Parker, Washington		
	Bloom period	March 18 to April 7 at Parker, Washington		
10	Flower type	Showy, fragrant, 1 to 4 per cluster		
	Petals	Quantity 5; length 1.8 to 2.1 cm, width 1.3 to 1.5 cm;		
		margins ruffled, overlapping; shape obovate to rotund;		
		color pink 69A		
	Sepals	Length 0.5 to 0.6 cm; width 0.4 to 0.5 cm; color red-purple		
15		<u>59A</u>		
	Flower size	Diameter 3.5 to 3.7 cm		
	Reproductive organs	Staymen white 155D, quantity 39, length 1.0 to 1.3 cm;		
		anther length 0.5 cm, brown 199A; filament 0.9 to 1.2 cm;		
		pistil 0.9 to 1.0 cm, smooth, yellow 3A		
20	Pollen	Scarce, yellow 1A		
	Fruit			
	Size	Small, diameter 70 mm, height 4.0 cm		

Shape (ventral view) Broad oblate

Shape of pistil end Weakly depressed

Symmetry Symmetric

Prominence of suture

Weak

5 Depth of stalk cavity Shallow, 0.5 cm

Width of stalk cavity Broad, 2.8 cm

Skin Color: ground color orange-red 34C, over color red-purple

59A; thin, smooth, tenacious

Ground color Orange yellow

10 Over color Present

Hue of over color Medium red

Pattern of over color Solid flush

Extent of over color Large

Pubescence Absent

15 Thickness of skin Medium

Adherence of skin to flesh Strong

Firmness of flesh

Soft

Ground color of flesh

Orange yellow-orange 17C

Anthocyanin coloration directly under skin Absent or very weakly expressed

20 Anthocyanin coloration of flesh Absent or very weakly expressed

Anthocyanin coloration around stone Absent or very weakly expressed

Texture of flesh Not fibrous

Sweetness

HighVery sweet, 12° Brix

Acidity

Low

Stone

Size

Small, diameter 3.0 cm

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Shape in lateral view

Oblate

Intensity of brown color

- Medium

Color

Red-purple 59C

Relief of surface

Small pits, ridges

Tendency of splitting at peak harvest Absent or very low

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Adherence to flesh

Absent (freestone)

Time of maturity for consumption Early, late July in Parker, Washington

Tendency to preharvest drop

Absent or very weak

Resistance to diseases and pests

None observed

Heat and cold tolerance

Tolerant in area tested (USDA Zone 6)

ABSTRACT

A new cultivar of nectarine tree (*Prunus persica* L. Batsch) named 'S 6816' is disclosed.

The fruit of 'S 6816' is oblate, yellow fleshed, and freestone, and is notable for its early maturity and very sweet flavor.

CLAIM

We claim:

A new and distinct nectarine tree, substantially as shown and described herein.